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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,345	01/21/2004	Li-Chun Chin	CHIH3004/EM	9778
23364	7590	10/11/2006	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			DESCHERE, ANDREW M	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	10/760,345		CHIN ET AL.	
	Examiner		Art Unit	
	Andrew M. Deschere		2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION***Specification***

The disclosure is objected to because of the following informalities: on page 5, lines 7-8, the specification states "the control circuit 123 controls the switch 121 and is aware that the output switch 16 is on." The American Heritage Dictionary defines "aware" as "having knowledge or cognizance." Examiner contends that the term "aware" implies conscious awareness more appropriate to human understanding than circuitry. Examiner suggests replacing the term "aware" with phrasing indicative of detecting a transmitted signal or electrical state.

Appropriate correction is required.

Claim Objections

Claims 1 and 2 objected to because of the following informalities: both of these claims contain the term "aware" in reference to circuit control. See above rejection with respect to the use of "aware" on page 8 of the specification. Appropriate correction is required.

Claim 1 objected to because of the following informalities: lines 13-14 of the claim state, "enable the automatic switch assembly to detect signal output from the peripheral device for controlling". This phrase is unclear as to what is being controlled—the peripheral or the automatic switch assembly. For the purpose of examination, the Examiner assumes that the claim intends that a signal output from the peripheral will control the switch assembly. Appropriate correction is required.

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Claim 1 objected to because of the following informalities: lines 15-16 state, "supply the computer to the peripheral device". It is unclear how one "supplies" a computer in this context. Examiner suggests "supply power from the computer to the peripheral device". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted element is a light illuminating device. The claim states "the battery voltage detector lights up the battery voltage low indicator". The claim provides no insight as to the structure of the battery voltage low indicator, such that it would be able to light up.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 2 rejected under 35 U.S.C. 102(e) as being anticipated by US 6,782,491 (Foedlmeier).

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Foedlmeier discloses a device for supplying power to a computer peripheral (Figures 1 and 2; column 4, lines 1-25). Input power USBVCC is connected through a switch S1 to output power VCC that supplies the peripheral electronics 20. A charge circuit 14 is connected to the input power through switch S2. A rechargeable battery (energy store) 16 is connected to the charge circuit; the battery is also connected the output power, by way of switch S3. Switch S3 is additionally connected to the charge circuit and switch S1. When connected to a computer 10, power management software 22 acts to control the peripheral's power by opening or closing switches S1-S3. If inadequate power is being supplied from the input power, switch S3 will close and switch S1 will open, so that current may be drawn from the energy store (column 4, lines 60-66).

With respect to claim 2, power management software 22 is realized within circuitry contained in "black box" 20 (column 4, lines 16-22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Foedlmeier and US 5,890,780 (Tomiyori).

Foedlmeier discloses a peripheral power supply with a rechargeable battery, but does not disclose safeguards on the battery's operation. Tomiyori teaches a power supply switching apparatus with battery protection functionality. Such safeguards are

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ensuring power supply voltage of a battery is at a high enough level (column 3, lines 1-5). Over-current conditions are detected such that the battery or the input supply is disconnected as necessary. Over-discharge and over-charge of the battery are also detected, with appropriate action taken as needed (Figure 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide battery protection as taught by Tomiyori in the invention of Foedlmeier in order to prevent damage to the battery due to improper voltage or current conditions.

With respect to claim 3, Examiner takes official notice that the use of visual low-battery indicators are well known in the art, such as a LED mounted on the case of a peripheral. It would have been obvious to one of ordinary skill in the art at the time of the invention to include such a visual indicator in the combination of Foedlmeier and Tomiyori to provide user indication of a low battery.

Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Foedlmeier and US 6,357,011 (Gilbert).

Foedlmeier teaches the use of a rechargeable battery, but does not specify the type of battery to be used. Gilbert teaches a peripheral supply system similar to that of Foedlmeier, and discloses that a rechargeable lithium battery may be used (column 3, lines 2-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a lithium battery in the invention of Foedlmeier for its long-life characteristics.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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- US 6199168 (Miller)
- US 5721481 (Narita)
- US 2004/0164708 (Veselic)

The above documents concern auxiliary power supply in peripheral devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Deschere whose telephone number is (571) 272-8391. The examiner can normally be reached on M-F 8:30-6:00, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMD



BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER